

Claims

- [c1] 1.A method of planarizing, comprising:
providing an article comprising a substrate and one or more structures disposed on the substrate;
forming a first material over the article;
forming a second material over the first material;
removing at least a portion of the second material using a polishing pad and a liquid; and
removing at least a portion of the first material.
- [c2] 2.The method of claim 1, wherein the second material is harder than the first material.
- [c3] 3.The method of claim 2, wherein the liquid contains abrasives, forming a slurry.
- [c4] 4.The method of claim 2, wherein the polishing pad comprises abrasives.
- [c5] 5.The method of claim 2, wherein none of the first material is removed when the at least a portion of the second material is removed.
- [c6] 6.The method of claim 1, wherein removing at least a portion of the second material comprises:
forming a substantially planar surface from the second material.
- [c7] 7.The method of claim 6, wherein the second material is harder than the first material.
- [c8] 8.The method of claim 6, further comprising:

removing an additional portion of the second material.

[c9] 9.The method of claim 8, wherein removing at least a portion of the first material comprises:

forming a substantially planar surface from the first material.

[c10] 10.The method of claim 8, wherein removing an additional portion of the second material comprises:

removing all of the second material remaining on the first material.

[c11] 11.The method of claim 8, wherein the portion of the first material and the additional portion of the second material are removed by etching.

[c12] 12.The method of claim 11, wherein the etching comprises:

etching using nonselective etching conditions.

[c13] 13.The method of claim 12, comprising:

removing more of the first material by a subsequent etching of the first material.

[c14] 14.A method of planarizing, comprising:

providing an article comprising a substrate and one or more structures disposed on the substrate, the structures providing the article with a non-planar topography;

forming a first material over the article;

forming a second material over the first material, wherein the second material is harder than the first material;

removing at least a portion of the second material using a polishing pad and a liquid, wherein removing the portion of the second material

provides the second material with a substantially planar topography;
removing an additional portion of the second material and at least a
portion of the first material using nonselective etching conditions,
wherein none of the second material remains after removing the portion
of the first material, and wherein the first material is provided with a
substantially planar topography; and
removing more of the first material by a subsequent etching of the first
material.

[c15] 15. The method of claim 14, wherein the liquid contains abrasives,
forming a slurry.

[c16] 16. The method of claim 14, wherein the polishing pad comprises
abrasives.

[c17] 17. The method of claim 14, wherein none of the first material is removed
when the at least a portion of the second material is removed.